

Amendments to the Claims:

Please cancel claims 1-19 and 27-40 without prejudice, and please add new claims 43-63 as set forth below. Following is a complete listing of the claims pending in the application, as amended:

1-42. (Cancelled)

43. (New) A reactor for plating a metal onto a surface of a workpiece, comprising:

a reactor bowl configured to contain a plating solution;

an anode in the reactor bowl; and

a workpiece holder spaced apart from the anode, the workpiece holder having a workpiece site defined by a plane in which the workpiece is to be secured for processing and a contact assembly, wherein the contact assembly comprises a support member, an electrically conductive base member attached to the support member and inclined at an angle sloping toward the workpiece plane with decreasing distance from a central axis of the support member, and a plurality of electrically conductive contact members projecting inwardly from the base member.

44. (New) The reactor of claim 43 wherein the base member comprises a first circumferential segment of a circle and a separate second circumferential segment of the circle, and wherein a plurality of contact members project from the first circumferential segment and a plurality of contact members project from the second circumferential segment.

45. (New) The reactor of claim 43 wherein the base member comprises a ring and the contact members are integral with the ring.

46. (New) The reactor of claim 45 wherein the ring comprises a conical band.

47. (New) The reactor of claim 43 wherein the electrically conductive base member and the contact members comprise titanium having a platinum coating.

48. (New) The reactor of claim 43 wherein the electrically conductive base member comprises a Belleville ring inclined at an angle sloping toward the workpiece plane with decreasing distance from the central axis of the support member, and the contact members project away from the Belleville ring at the same angle.

49. (New) The reactor of claim 43, further comprising a barrier extending inwardly of the contact members and having a seal configured to engage a periphery of the workpiece when the workpiece is at the workpiece site.

50. (New) The reactor of claim 43 wherein the contact members project radially inward relative to the central axis of the support member and are inclined at an angle sloping toward the workpiece plane with decreasing distance from the central axis.

51. (New) The reactor of claim 43 wherein the contact members project inward at a swept angle relative to the central axis and are inclined at an angle sloping toward the workpiece plane with decreasing distance from the central axis.

52. (New) The reactor of claim 43 wherein the support member comprises an annular fixture having an opening configured to receive the workpiece, and the workpiece holder further comprises a backplate configured to be received through at least a portion of the opening.

53. (New) The reactor of claim 52 wherein the base member comprises a ring and the contact members are integral with the ring.

54. (New) The reactor of claim 52 wherein the base member comprises a conical ring-like band and the contact members are integral with the band.

55. (New) A reactor for electrochemically processing a workpiece, comprising:

a bowl configured to contain a processing solution;
an electrode in the bowl and configured to contact the processing solution; and
a head assembly having a rotational motor and a workpiece holder attached to the rotational motor to rotate about a rotational axis, wherein the workpiece holder comprises (a) a support member having an opening configured to receive a workpiece in a workpiece plane, (b) a conductive ring member having a lower region attached to the support member at a first distance from the workpiece plane and an upper region at a second distance from the workpiece plane less than the first distance, and (c) a plurality of contact members projecting inwardly from the upper region of the ring member, and wherein a distal portion of the contact members are inclined at an angle sloping toward the workpiece plane with decreasing distance from the rotational axis.

56. (New) The reactor of claim 55 wherein the ring member is a conical band inclined at an angle sloping toward the workpiece plane with decreasing distance from the rotational axis.

57. (New) The reactor of claim 55 wherein the ring member has a truncated conical shape.

58. (New) The reactor of claim 57 wherein the contact members project from the upper region radially inwardly relative to the rotational axis.

59. (New) The reactor of claim 57 wherein the contact members project from the upper region at a swept angle relative to the rotational axis.

60. (New) The reactor of claim 55 wherein the ring member comprises a continuous single-piece ring.

61. (New) The reactor of claim 55 wherein the ring member comprises a first ring segment having a first circumferential portion of a circle and a separate second ring segment having a second circumferential portion of the circle.

62. (New) The reactor of claim 55 wherein the workpiece holder further comprises a barrier having an annular lip configured to seal against a surface of a workpiece at the workpiece plane inwardly from the contact members.

63. (New) The reactor of claim 55 wherein the support member is composed of a conductive material and the ring member comprises a metal Belleville ring inclined at an angle sloping toward the workpiece plane with decreasing distance from the rotational axis.